



# CCTV Video over Fibre

AVF series

## Quick Installation Guide



Infinity

v1.00 - 1404

## Overview

LevelOne AVF CCTV Video to Fibre Converter series is designed to transmit composite video signals via optical fibre over long distance. In the transmitting side, the video signal is digitalized and converted to optical signal and then transmitted over the fibre link to the receiver. The receiver recovers the optical signal to analogue video signal and displays images on monitor. It provides surveillance systems the high quality and long distances transmission over optical fibre cable; it is ideal kit for the CCTV Surveillance and Video Wall System applications

## High Reliability

All components are built to withstand harsh environment applications without compromise where humidity, temperature variation and even shock vibration are concerns, including Electric & Utility, Critical Infrastructure, Transportation and Surveillance Security. This device operates under -25 to 75 Celsius (-13 to 167 Fahrenheit) temperature.



AVF Series

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## Features

- Transmits analogue video signal over single fibre cable
- Uncompressed high quality video transmission
- Transmit up to 20 km without optical attenuation
- No RF interference or signal degradation over optical fibre
- No EMI and electromagnetic interference
- LED indicator status for instance system monitoring
- True Plug & Play design facilitates ease of installation
- Operation temperature -25 to 75 C (-13 to 167 F)
- Supports RS-485 data protocol (Optional)

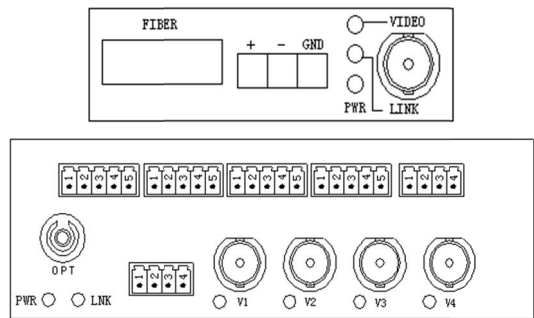
## Package Contents

- CCTV Video Converter (TX)
- CCTV Video Converter (RX)
- Power Adapter x 2
- Quick Installation Guide

## Model List

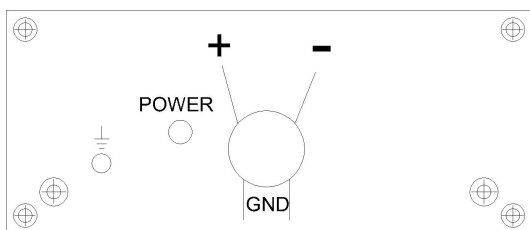
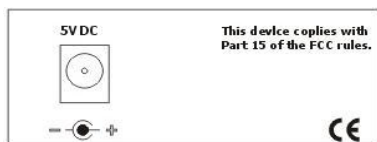
Model	Description
AVF-1000	1-CH Video over Fibre mini Converter FC SMF 20KM w/ RS485 Kit
AVF-1100	1-CH Video over Fibre Converter FC SMF 20KM Kit
AVF-1200	2-CH Video over Fibre Converter FC SMF 20KM Kit
AVF-1400	4-CH Video over Fibre Converter FC SMF 20KM Kit
AVF-1800	8-CH Video over Fibre Converter FC SMF 20KM Kit
AVF-1160	16-CH Video over Fibre Converter FC SMF 20KM Kit
AVF-1160R	16-CH Video over Fibre Converter FC SMF 20KM Kit (19inch 1U)
CHV-2100	19 inch 3U 18-Slot Chassis

## LED Status



LED	Status	Description
PWR	Steady	Power On
	Off	Power Off
LNK	Steady	Fibre link established
	Off	No fibre link
Video / V	Steady	Video signal connected
	Off	No video signal detected

# Power Input



- Power Input: 90 to 264VAC @ 50 to 60Hz
- Power Output: 5VDC @ 2A

WARNING – any exceeded input voltage will not make this unit function and may damage this unit.

# Specification

<b>Model</b>	▪ AVF-1000	
<b>Interface Video</b>	▪ BNC	
<b>Video</b>	<ul style="list-style-type: none"> <li>Format</li> <li>Impedance</li> <li>Level</li> <li>Signal Noise</li> <li>Bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>NTSC / PAL</li> <li>75 ohm unbalanced</li> <li>1 Vp-p nominal</li> <li>63 dB (S/N)</li> <li>5 Hz to 6.5 MHz</li> </ul>
<b>Optical</b>	<ul style="list-style-type: none"> <li>Connector</li> <li>Fibre Type</li> <li>Wavelength</li> <li>Distance</li> <li>Transmit Power</li> <li>Receive Sensitivity</li> <li>Link Budget</li> </ul>	<ul style="list-style-type: none"> <li>FC</li> <li>Single-mode @ Single fibre</li> <li>1310 / 1550 nm</li> <li>20 km</li> <li>2 dB</li> <li>&lt; -36 dB</li> <li>33 dB</li> </ul>
<b>Data</b>	<ul style="list-style-type: none"> <li>RS485</li> <li>Terminal Block</li> <li>150 Kbps</li> </ul>	
<b>Power Input</b>	▪ DC5V	
<b>Operation Temperature</b>	▪ -25 to 75 C (-13 to 167 F)	
<b>Humidity</b>	▪ 0 to 95% non-condensing	
<b>Dimension</b>	▪ 94 x 71 x 26 mm	
<b>Weight</b>	▪ 450 g	
<b>Approval</b>	▪ CE, EN50130-5, BS2011	

## Optional Chassis

<b>CVH-2000</b>	▪ 19 inch 2U 14-Slot Chassis 5V 16A
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# Specification

Model	AVF-1100	AVF-1200	AVF-1400	AVF-1800	AVF-1160
<b>Interface Video</b>	BNC x 1	BNC x 2	BNC x 4	BNC x 8	BNC x 16
<b>Video</b>	<ul style="list-style-type: none"> <li>Format</li> <li>Impedance</li> <li>Level</li> <li>Signal Noise</li> <li>Bandwidth</li> </ul>		<ul style="list-style-type: none"> <li>NTSC / PAL</li> <li>75 ohm unbalanced</li> <li>1 Vp-p nominal</li> <li>63 dB (S/N)</li> <li>5 Hz to 6.5 MHz</li> </ul>		
<b>Optical</b>	<ul style="list-style-type: none"> <li>Connector</li> <li>Fibre Type</li> <li>Wavelength</li> <li>Distance</li> <li>Transmit Power</li> <li>Receive Sensitivity</li> <li>Link Budget</li> </ul>		<ul style="list-style-type: none"> <li>FC</li> <li>Single-mode @ Single fibre</li> <li>1310 / 1550 nm</li> <li>20 km</li> <li>2 dB</li> <li>&lt; -36 dB</li> <li>33 dB</li> </ul>		
<b>Data</b>	▪ Optional				
<b>Power Input</b>	▪ DC5V				
<b>Operation Temperature</b>	▪ -25 to 75 C (-13 to 167 F)				
<b>Humidity</b>	▪ 0 to 95% non-condensing				
<b>Dimension</b>	▪ 110 x 174 x 47 mm				
<b>Weight</b>	1.1 kg	1.3 kg	1.4 kg	1.5 kg	2.0 kg
<b>Approval</b>	▪ CE, EN50130-5, BS2011				

## Optional Chassis

<b>CHV-2100</b>	▪ 19 inch 3U 18-Slot Chassis 5V 20A
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# Specification

<b>Model</b>	▪ AVF-1600R (1U 19 inch rack mount)	
<b>Interface Video</b>	▪ BNC x 16	
<b>Video</b>	<ul style="list-style-type: none"> <li>Format</li> <li>Impedance</li> <li>Level</li> <li>Signal Noise</li> <li>Bandwidth</li> </ul>	<ul style="list-style-type: none"> <li>NTSC / PAL</li> <li>75 ohm unbalanced</li> <li>1 Vp-p nominal</li> <li>63 dB (S/N)</li> <li>5 Hz to 6.5 MHz</li> </ul>
<b>Optical</b>	<ul style="list-style-type: none"> <li>Connector</li> <li>Fibre Type</li> <li>Wavelength</li> <li>Distance</li> <li>Transmit Power</li> <li>Receive Sensitivity</li> <li>Link Budget</li> </ul>	<ul style="list-style-type: none"> <li>FC</li> <li>Single-mode @ Single fibre</li> <li>1310 / 1550 nm</li> <li>20 km</li> <li>2 dB</li> <li>&lt; -36 dB</li> <li>33 dB</li> </ul>
<b>Data</b>	▪ Optional	
<b>Power Input</b>	▪ 100 to 240VAC	
<b>Operation Temperature</b>	▪ -25 to 75 C (-13 to 167 F)	
<b>Humidity</b>	▪ 0 to 95% non-condensing	
<b>Dimension</b>	▪ 437 x 220 x 44 mm	
<b>Weight</b>	▪ 2.0 kg	
<b>Approval</b>	▪ CE, EN50130-5, BS2011	